

Notice of Allowability

Application No.

10/531,712

Examiner

William H. Mayo III

Applicant(s)

ARAKAWA, HIDEO

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to August 22, 2007.
2. ☒ The allowed claim(s) is/are 6, 10-16, 18 and 19.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Drawings

1. The drawings were received on August 22, 2007. These drawings are approved.

Allowable Subject Matter

2. Claims 6, 10-16, and 18-19 are allowed.
3. The following is an examiner's statement of reasons for allowance: This invention deals with a An electrical apparatus suspension unit comprising: a plurality of power supply wires, each comprising a core wire comprising stranded wires made of copper alloy having high strength and high conductivity, and an insulating layer covering said core wire a lower holder gripping a lower end portion of each of said power supply wires, said lower holder being connectable to at least one hung member of an electrical apparatus; and an upper holder gripping an upper end portion of each of said power supply wires wherein upper and lower ends of the core wires of at least two of said power supply wires are connectable to a terminal of said electrical apparatus and a power line, respectively (claim 6). This invention also deals with a wire grip comprising: an inner sleeve having a wire-insertion bore for inserting a wire, a plurality of ball-set bores opened at both of said wire-insertion bore and an outer surface of said inner sleeve, and a tapered outer surface which is formed at a portion where said ball-set bores are formed; a plurality of balls received in said ball-set bores and protruding partially into said wire-insertion bore so as to be pressed to said wire; an outer sleeve

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having a tapered inner surface which is contacted with said tapered outer surface of said inner sleeve so as to press said balls inwardly; and a spring which biases said inner sleeve with respect to said outer sleeve in a direction in which the tapered outer surface is tapered down, wherein each of said inner sleeve and said outer sleeve has a slotted groove communicating with said wire-insertion bore, and wherein said wire grip further comprises a jig by which said wire is pushed into said slotted grooves (claim 10).

This invention also deals with an electrical apparatus suspension method for suspending an electrical apparatus using a power supply wire comprising a core wire comprising stranded wires made of copper alloy having high strength and high conductivity, an insulating layer covering the core wire and an outer layer comprising braided wires made of nonmagnetic metal and covering the insulating layer, wherein the electrical apparatus is securely held to said wire using a wire grip, the wire grip comprising: an inner sleeve having a wire-insertion bore for inserting said wire, a plurality of ball-set bores opened at both of said wire-insertion bore and an outer surface of said inner sleeve and a tapered outer surface which is formed at a portion where said ball-set bores are formed; a plurality of balls received in said ball-set bores and protruding partially into said wire-insertion bore so as to be pressed to said wire; an outer sleeve having a tapered inner surface which is contacted with said tapered outer surface of said inner sleeve so as to press said balls inwardly; and a spring which biases said inner sleeve with respect to said outer sleeve in a direction in which said tapered outer surface is tapered down, wherein said wire grip further comprises a jig for pushing said wire into slotted grooves, which are formed at said inner sleeve and said

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outer sleeve and communicated with said wire-insertion bore, wherein said method comprises fitting said wire into said slotted grooves from a side surface of said wire grip and pushing said wire into said slotted grooves using said jig so that said wire is held by said wire grip (claim 12). The above stated claimed limitations are not taught or suggested by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments


4. Applicant's arguments filed August 22, 2007 have been fully considered and they are persuasive. Specifically, the applicant's argument with respect to claims 6, 10, and 12, are persuasive and therefore the claims have been allowed.

Communication

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William H. Mayo III
Primary Examiner
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WHM III
September 14, 2007

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FIG. 2

